GASTROINTESTINAL DISORDERS – Patient-Reported Outcomes Studies

PGI19

PRESCRIPTION RATES AND ADHERENCE TO PROTON PUMP INHIBITOR THERAPY AMONG PATIENTS WHO REQUIRE LOW-DOSE ACETYLSALICYLIC ACID FOR CARDIOVASCULAR PREVENTION

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OBJECTIVES: Low-dose acetylsalicylic acid (ASA; 75–325 mg daily) is a mainstay of cardiovascular (CV) prevention. However, some patients taking low-dose ASA may experience upper gastrointestinal (GI) symptoms that are associated with poor adherence to and discontinuation of low-dose ASA. Established gastroprotective strategies, e.g. concomitant proton pump inhibitor (PPI) therapy, may ameliorate these symptoms and thus improve low-dose ASA adherence. **METHODS:** This subanalysis of a multinational, observational, non-interventional study (NCT00681759) conducted in the United States, Canada and France assessed PPI prescription rates (one-time retrospective survey) and daily PPI adherence rates (prospective 3-month eDiary phase) in adult patients with increased GI risk who had been prescribed low-dose ASA for management of CV risk. Here, increased GI risk was defined as a history of peptic ulcer and/or complications or additional antiplatelet use (clopidogrel, ticlopidine, dipyridamole). **RESULTS:** A total of 195 of the 1770 patients in the survey were identified as having increased GI risk (history of peptic ulcer and/or complications, n = 109; concomitant antiplatelet therapy, n = 74; both factors, n = 12); 119 (61%) of whom were not prescribed a PPI. a total of 340 patients entered the eDiary phase, of whom 110 were prescribed a PPI before the first diary day; of these, 79 patients were prescribed a daily PPI for the 3-months. Among these patients, fewer than half (n = 37) took >75% of prescribed daily PPIs. Almost one-third (n = 25) did not take their prescribed daily PPI at all during the 3-month phase. **CONCLUSIONS:** PPI prescription and adherence rates are low among patients with increased GI risk receiving low-dose ASA for CV risk management. Strategies that deliver gastroprotection with improved adherence rates during low-dose ASA therapy in patients with increased GI risk may be warranted.

PGI20

MEDICATION ADHERENCE AND PERSISTENCE IN THE TREATMENT OF ULCERATIVE COLITIS: ANALYSES WITH THE RAMQ DATABASE

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OBJECTIVES: Non-adherence with oral mesalazines has a significant impact on treatment outcome which is one of the most important predictors for relapse in ulcerative colitis. The objective of this study was to assess adherence and persistence with oral mesalazines, particularly to analyze whether adherence with oral mesalazines is linked to the use of once daily high strength Mezavant® compared to more frequent dosing and/or low strength oral mesalazines. **METHODS:** A retrospective prescription claims analysis of a random sample of patients from the Quebec provincial public health plan (RAMQ) database was conducted. New users of a mesalazine formulation during the period from January 2005 to December 2009 and with no diagnosis of Crohn's disease were eligible for inclusion in the analysis. Treatment adherence was estimated using medication possession ratio over a one-year period. For the analysis of persistence to treatment, patients were considered non-persistent if they had not used the mesalazines medication for a period of twice the median duration of prescriptions. Proportion of patients who were persistent was estimated at 3-, 6-, and 12 months after index prescription. **RESULTS:** The mean age of the study sample was 55.7 years (SD = 18.2) and the proportion of males and female were similar (48.8% vs. 51.2%). The proportion of patients ≥80% compliant on the mesalazine long acting formulation (Mezavant®) (46.3%) was significantly higher compared with all other mesalazine formulations (1.6% to 26.0%) ($P < 0.001$). The proportion of patients who were persistent at 12 months on Mezavant® (70.2%) was higher when compared with those on any other mesalazine formulations (14.5% to 42.6%) ($P < 0.001$). Similar trends were observed at all time points examined. **CONCLUSIONS:** Results of these prescription claims analyses indicate that adherence and persistence to mesalazine formulations are relatively poor, however improved adherence and persistence are observed with the long acting formulation (Mezavant®).

PGI21

RELATIONSHIP BETWEEN PATIENT PREFERENCES FOR 5-ASA THERAPIES AND SELF-REPORTED ADHERENCE

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OBJECTIVES: The effectiveness of 5-aminosalicylic acid (5-ASA) therapy for mild to moderate ulcerative colitis (UC) is commonly affected by poor medication adherence. The present study was designed to determine if adherence behaviour could be explained by differences in patient preferences for 5-ASA therapies. **METHODS:** A discrete choice experiment (DCE) survey was used to explore patient preferences for different aspects of oral 5-ASA therapy. The DCE survey captured trade-offs that patients were willing to make and was based on a literature review, clinician interviews, and in-depth interviews with UC patients (followed by cognitive debriefing). Six attributes were identified: *Ease–of–swallowing*, *Number of administrations per day*, *Number of pills* (per administration), *Symptom flare resolution*; *Likelihood of flare occurrence* and *Cost* (to estimate willingness-to-pay (WTP) for improvements in attributes). Adherence behaviour was assessed using the Modified Morisky Scale. Participants (mild to moderate UC patients, n = 400) in the UK, US, Germany, and Canada were recruited through specialist patient recruitment agencies and the survey was administered via the internet, following IRB approval. Data were analyzed using the conditional logit procedure. **RESULTS:** Clinical effectiveness was most highly valued by participants independent of country of origin (e.g. reduction in annual flare risk to 10%: WTP = £78.81 per month) and a return to normal bowel functioning with mucosal healing (WTP = £29.24). Significant interaction terms identified that people who reported good adherence placed greater value on symptom control compared with self reported poor adherers to therapy ($P = 0.011$). **CONCLUSIONS:** Data suggest that the most highly valued aspect of therapy was effectiveness. Therefore, patients may adhere to a medication better if they place greater value on its ability to effectively treat their UC. Furthermore, these data suggest a possible avenue for physicians to explore with their patients to improve adherence to the treatment regimen by highlighting the risk-benefit profile of 5-ASAs in the treatment of UC.

PGI22

MAPPING PAC-QOL SCORES ONTO THE EQ-5D

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OBJECTIVES: The clinical trial programme for Prucalopride, a selective and high affinity 5-HT4 receptor agonist, incorporated a constipation specific HRQoL measure (PAC-QOL) and SF-36 but not EQ-5D. a mapping relationship was developed to link EQ-5D to PAC-QOL using established algorithms linking EQ-5D and SF-36. **METHODS:** Trial responses (n = 5488) on a common patient data set enabled an empirical link to be established between the SF-36 and PAC-QOL which was extended to EQ-5D through the established algorithm. Having established this relationship a range of functional forms for mapping PAC-QOL onto EQ-5D were tested ranging from a simple linear relationship to more complex mapping structures incorporating quadratic and interactive terms. **RESULTS:** The relationship between PAC-QOL and EQ-5D was generally good. The estimated equation for deriving EQ-5D from PAC-QOL in its' simplest linear functional form was: EQ-5D = 97.7–9.8 (PAC-QOL). This implies that a one point change in PAC-QOL overall score would lead to a 9.8% change in EQ-5D. As expected, the mapping was largely limited to the upper health states of EQ-5D given that chronic constipation by itself is unlikely to lead to the severest forms of disability. This initial regression analysis displayed elements of non-linearity and hence a more complex analysis was undertaken which incorporated square and interaction terms. This new functional form facilitated a more accurate relationship to be established between PAC-QOL and EQ-5D. **CONCLUSIONS:** Mapping is required whenever a preference based generic HRQoL measure is not directly collected in clinical trials. Very limited theoretical guidance is available to structure such analyses and therefore empiricism largely rules. However by testing the robustness of the results to different assumptions and functional forms a robust mapping can be developed. This process was employed here to convert PAC-QOL into EQ-5D utility scores for incorporation into Cost Utility analyses.

PGI23

IDENTIFYING ENDPOINTS FOR IRRITABLE BOWEL SYNDROME (IBS) CLINICAL TRIALS: INCORPORATING THE PATIENT'S VOICE

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OBJECTIVES: 1) Identify a comprehensive set of symptoms experienced by patients with irritable bowel syndrome with constipation (IBS-C), and 2) Identify the most important symptoms for measurement in clinical trials for IBS-C. **METHODS:** Two iterative sets of in-depth interviews were conducted in different US cities, with a total of 27 participants meeting modified Rome II criteria for IBS-C. a semi-structured interview guide was used, beginning with a series of open-ended questions to elicit all relevant symptoms, followed by interviewer probes to fully understand the relationships among the concepts. Multiple rating and ranking methods were used to develop a subset of IBS-C symptoms of greatest importance to patients. For example, participants were asked to identify their most bothersome IBS-C symptoms, as well as those in which they would most like to see an improvement with treatment. **RESULTS:** When asked to describe their IBS-C symptoms, patients reported 54 potentially distinct concepts: 8 abdominal symptoms, 12 bowel symptoms, 31 additional physical symptoms (e.g., nausea, headache), and 3 emotional issues (e.g., irritability, depression). Some symptom terms were highly related (e.g., abdominal pain and stomach ache) and others could be considered consequential to IBS-C (e.g., hemorrhoids, vomiting). Results of the subsequent rating and ranking tasks suggest that abdominal pain, abdominal discomfort, bloating, stool frequency, stool consistency, straining, and incomplete evacuation were distinct and represent patients' most bothersome symptoms. Further, according to the patients, improvements in these symptoms would constitute an improvement in IBS-C overall. **CONCLUSIONS:** Patient input is vital to identify the full spectrum of symptoms and to determine an optimal set of clinical trial endpoints. Within and across the two separate rounds of interviews, participants consistently reported the importance of abdominal pain, abdominal discomfort, bloating, stool frequency, stool consistency, straining, and incomplete evacuation, demonstrating concept saturation and supporting the measurement of these symptoms in IBS-C clinical trials.